

**The Jackson Laboratory  
Hancock County  
Bar Harbor, Maine  
A-93-71-N-R (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

The Jackson Laboratory (JL) of Bar Harbor, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their biomedical research facility.

**B. Emission Equipment**

The following equipment is addressed in this air emission license:

**Fuel Burning Equipment**

<b><u>Equipment</u></b>	<b><u>Maximum Capacity (MMBtu/hr)</u></b>	<b><u>Maximum Firing Rate (gal/hr)</u></b>	<b><u>Fuel Type, % sulfur</u></b>	<b><u>Stack #</u></b>
Boiler #3	10.5	75.0	#2 Fuel Oil, 0.25%	1
Boiler #7	33.5	239.3	#2 Fuel Oil, 0.25%	5
Boiler #8	33.5	239.3	#2 Fuel Oil, 0.25%	5
Boiler #9	12.5	89.3	#2 Fuel Oil, 0.25%	5
Boiler #10	20.9	149.3	#2 Fuel Oil, 0.25%	1
Boiler #11	20.9	149.3	#2 Fuel Oil, 0.25%	1

### Electrical Generation Equipment

<u>Equipment</u>	<u>Power Output (kW)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Firing Rate (gal/hr)</u>	<u>Stack #</u>
Generator #2	230	2.33	17.0	4G
Generator #3	250	2.46	18.0	5G
Generator #5	100	0.96	7.0	7G
Generator #6	1250	12.47	91.0	1G
Generator #8	1500	15.43	112.6	8G
Generator #9	1500	15.43	112.6	9G
Generator #10	1500	15.43	112.6	10G

### Process Equipment

<u>Equipment</u>	<u>Pollution Control Equipment</u>
Ethylene Oxide Sterilization Units (2)	None

### Underground Petroleum Storage Tanks

- One 2,000 gallon gasoline tank

### Incinerators

Incinerator #1 is a Consumat Model C75-P2H with the following specifications:

<b>Class Incinerator</b>	IV-B
<b>No. of Chambers</b>	2
<b>Type of Waste</b>	types 0-5, 7
<b>Max. Design Combustion Rate (lb/hr)</b>	175
<b>Auxiliary Fuel Input:</b>	
<b>Primary Chamber (Btu/hr)</b>	700,000      #2 fuel oil
<b>Secondary Chamber (Btu/hr)</b>	4,000,000      #2 fuel oil
<b>Emissions Control</b>	Secondary Chamber

Incinerator #2 is a Consumat Model C75-P1 with the following specifications:

<b>Class Incinerator</b>	IV-A
<b>No. of Chambers</b>	2
<b>Type of Waste</b>	types 0-4
<b>Max. Design Combustion Rate (lb/hr)</b>	175
<b>Auxiliary Fuel Input:</b>	
<b>Primary Chamber (Btu/hr)</b>	700,000      #2 fuel oil
<b>Secondary Chamber (Btu/hr)</b>	2,000,000      #2 fuel oil
<b>Emissions Control</b>	Secondary Chamber

#### C. Application Classification

The application for JL does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only.

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

### B. Boilers

JL operates Boilers #3, #7, #8, #9, #10, and #11 primarily for facility hot water and heating needs.

Boilers #3, #7, and #8 were manufactured prior to 1989 and are therefore not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

Boilers #9, #10, and #11 are subject to NSPS Subpart Dc standards.

A summary of the BPT analysis for Boiler #3 (10.5 MMBtu/hr), Boilers #7 and #8 (33.5 MMBtu/hr each), Boiler #9 (12.5 MMBtu/hr), and Boilers #10 and #11 (20.9 MMBtu/hr each) is the following:

1. The total fuel use for the facility shall not exceed 2,250,000 gal/year of #2 fuel oil, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.25% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case a BPT analysis for SO<sub>2</sub> determined a more stringent limit of 0.25% was appropriate and shall be used.
3. Chapter 103 regulates PM emission limits. The PM<sub>10</sub> limits are derived from the PM limits.
4. NO<sub>x</sub> emission limits are based on data from similar #2 fired boilers of this size and age.
5. CO and VOC emission limits are based upon AP-42 data dated 9/98.
6. Visible emissions from the boilers shall each not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block averages in a continuous 3-hour period.

C. Emergency Generators

JL operates seven back up emergency diesel generators.

“Emergency” is defined in Chapter 100 and throughout this document as: “... any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology based emission limitation under the license, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.”

Therefore, by definition, a diesel used for load shedding purposes (also known as a “Dispatchable Load Generators”) is not considered an “Emergency Generator”. The emergency does not occur until offsite power is unavailable and the generators supply power to bring emergency equipment on-line or to safely shut down equipment.

A summary of the BPT analysis for Generators #3 (250 kW each), Generator #2 (230 kW), Generator #5 (100 kW), Generator #6 (1250 kW), and Generators #8, #9, and #10 (1500 kW each) is the following:

1. The emergency generators shall fire only diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
2. Generators #2, #3, #5, and #6 shall each be limited to 500 hr/yr of operation based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours.
3. Generators #8, #9, and #10 shall each be limited to 300 hr/yr of operation based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours.
4. Chapter 106 regulates fuel sulfur content, however in this case a BPT analysis for SO<sub>2</sub> determined a more stringent limit of 0.05% was appropriate and shall be used.
5. Chapter 103 regulates PM emission limits for Generators #6, #8, #9, and #10. The PM<sub>10</sub> limits and the PM limits for Generators #2, #3, and #5 are derived from Chapter 103.
6. NO<sub>x</sub>, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
7. Visible emissions from the emergency generators shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

**D. Incinerator Emission Sources**

**1. Incinerator #1**

Incinerator #1 is a Consumat C75-P2H Class IV-B incinerator for disposal of type 0 through 5 and type 7 wastes only. To meet the requirements of BPT the incinerator shall be operated according to the following specifications:

Operating temperature in the secondary chamber shall be maintained at or above 2000 °F with a stack gas retention time, at or above 2000 °F, of at least 2.0 second.

To insure an efficient burn, and to prevent odors and visible emissions, the secondary chamber will be preheated, as specified by the manufacturer.

The temperature in the secondary chamber shall be maintained at or above 2000 °F for the duration of the burn cycle.

A pyrometer and 1/4 inch test port shall be installed and maintained at that location of the incinerator which provides sufficient volume to insure a flue gas retention time of not less than 2.0 seconds at a minimum of 2000 °F.

A log will be maintained recording the weight of the waste charged, preheat time, charging time and the temperature of the secondary chamber every 60 minutes after start-up until, and including, final shutdown time. For facilities operating a chart recorder, the start time, date, and weight of waste charged may be logged on the chart.

A maximum particulate emission rate of 0.10 gr/dscf corrected to 7% O<sub>2</sub> will be met.

The ash will be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management.

The incinerator operator(s) shall receive adequate training annually to operate the incinerator in accordance with the manufacturer's specifications and shall be familiar with the terms of the Air Emission License. All training records shall be certified by the plant manager and be available to the Department upon request.

**2. Incinerator #2**

Incinerator #2 is a Consumat C75-P1 Class IV-A incinerator for the disposal of types 0 through 4 waste only. To meet the requirements of BPT the incinerator shall be operated according to the following specifications:

Operating temperature in the secondary chamber shall be maintained at or above 1800°F with a stack gas retention time, at or above 1800 °F, of at least 1.0 second.

To insure an efficient burn, and to prevent odors and visible emissions, the secondary chamber will be preheated, as specified by the manufacturer.

The temperature in the secondary chamber shall be maintained at or above 1800 °F for the duration of the burn cycle.

A pyrometer and 1/4 inch test port shall be installed and maintained at that location of the incinerator which provides sufficient volume to insure a flue gas retention time of not less than 1.0 seconds at a minimum of 1800 °F.

A log will be maintained recording the weight of the waste charged, preheat time, charging time and the temperature of the secondary chamber every 60

minutes after start-up until, and including, final shutdown time. For facilities operating a chart recorder, the start time, date, and weight of waste charged may be logged on the chart.

A maximum particulate emission rate of 0.10 gr/dscf corrected to 7% O<sub>2</sub> will be met.

The ash will be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management.

The incinerator operator(s) shall receive adequate training to operate the incinerator in accordance with the manufacturer's specifications and shall be familiar with the terms of the Air Emission License.

**E. Other Emission Sources**

The Jackson Laboratory also operates two (2) ethylene oxide sterilization units at this facility. The emissions from each of these units are greater than 20% of the insignificant threshold as stated in Chapter 115 and therefore must be addressed. These units shall be operated according to the manufacturers specifications to ensure that the emissions of ethylene oxide (a HAP) will be minimal. JL shall not emit more than 1.0 ton/year of ethylene oxide.

JL has a 2,000 gallon tank that dispenses gasoline to motor vehicles. Chapter 118 requires the installation of a submerged fill pipe and maintenance of throughput records for all gasoline dispensing facilities, regardless of throughput. JL shall install a submerged fill pipe in the gasoline storage tank that is no more than 6 inches from the bottom of the tank. JL shall also maintain on its premises, records of gasoline throughput, which will allow the monthly and annual throughput to be determined. If JL's monthly or annual throughput ever exceeds the initial applicability threshold for the Stage I provisions of Chapter 118, JL shall notify the Department of its applicability within thirty (30) days and install a Stage I Vapor Balance System in accordance with Section 3(B)(1) of the regulation, within sixty (60) days. Copies of these records shall be maintained for a minimum of three (3) years. These records shall be available for inspection during normal business hours and copies shall be provided to the Department and/or EPA upon request.

F. Annual Emissions

JL shall be restricted to the following annual emissions, based on a 12 month rolling total:

**Total Allowable Annual Emission for the Facility**  
(used to calculate the annual license fee)

	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>	<b>HAP</b>
Boilers	12.6	12.6	39.7	47.3	5.6	0.2	-
Generator #2	0.1	0.1	0.1	2.6	0.6	0.2	-
Generator #3	0.1	0.1	0.1	2.7	0.6	0.2	-
Generator #5	0.1	0.1	0.1	1.1	0.2	0.1	-
Generator #6	0.4	0.4	0.2	10.0	2.7	0.3	-
Generator #8	0.3	0.3	0.1	4.3	2.0	0.2	-
Generator #9	0.3	0.3	0.1	4.3	2.0	0.2	-
Generator #10	0.3	0.3	0.1	4.3	2.0	0.2	-
Incinerator #1	3.0	3.0	4.2	9.3	0.8	0.4	-
Incinerator #2	3.0	3.0	4.2	9.3	0.8	0.4	-
Sterilizers	-	-	-	-	-	-	0.8
<b>Total TPY</b>	<b>20.2</b>	<b>20.2</b>	<b>49.9</b>	<b>95.2</b>	<b>17.3</b>	<b>2.4</b>	<b>0.8</b>

### III.AMBIENT AIR QUALITY ANALYSIS

JL previously submitted an ambient air quality analysis, as part of Air Emission License A-93-71-M-A, which demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this renewal.

### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-93-71-N-R subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [MEDEP Chapter 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an

application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]

- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
  - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - 2. pursuant to any other requirement of this license to perform stack testing.
  - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - C. submit a written report to the Department within thirty (30) days from date of test completion.[MEDEP Chapter 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
  - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a

demonstration of compliance under normal and representative process and operating conditions.  
[MEDEP Chapter 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [MEDEP Chapter 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]
- (16) **Boilers**
- A. Total fuel use for the boilers shall not exceed a combined limit of 2,250,000 gal/yr of #2 fuel oil with a maximum sulfur content not to exceed 0.25% by weight. Compliance shall be demonstrated by fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Records of annual fuel use shall be kept on a 12-month rolling total basis. [MEDEP Chapter 115, BPT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #3	PM	0.08	MEDEP, Chapter 115, BPT
Boiler #7	PM	0.08	MEDEP, Chapter 115, BPT
Boiler #8	PM	0.08	MEDEP, Chapter 115, BPT
Boiler #9	PM	0.08	MEDEP, Chapter 115, BPT
Boiler #10	PM	0.08	MEDEP, Chapter 115, BPT
Boiler #11	PM	0.08	MEDEP, Chapter 115, BPT

C. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3	0.84	0.81	2.64	3.15	0.38	0.02
Boiler #7	2.68	2.68	8.43	10.05	1.20	0.05
Boiler #8	2.68	2.68	8.43	10.05	1.20	0.05
Boiler #9	1.00	1.00	3.15	3.75	0.45	0.02
Boiler #10	1.67	1.67	5.26	6.27	0.75	0.03
Boiler #11	1.67	1.67	5.26	6.27	0.75	0.03

- D. Visible emissions from Boilers #3, #7 and #8 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [MEDEP Chapter 101]
- E. Visible emissions from Boilers #9, #10, and #11 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average per hour of not more than 27% opacity. [40 CFR Part 60, Subpart Dc]

(17) **New Source Performance Standards for Boilers #9, #10, and #11**

Boilers #9, #10, and #11 are subject to Federal New Source Performance Standards, Subpart Dc. JL shall comply with all requirements of 40 CFR Part 60, Subpart Dc including, but not limited to, the following:

- A. JL shall keep records on file that they submitted notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up. This notification shall include the design heat input capacity of the boilers and the type of fuel to be combusted.
- B. JL shall keep records on file that they performed and submitted to EPA and the Department an initial performance test within 30 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility. The performance test shall consist of fuel supplier certification of the sulfur content of the fuel fired in Boilers #9, #10 and #11. The fuel supplier certification must contain the name of the oil supplier and a statement from the oil supplier that the oil complies with ASTM specifications for #2 fuel oil.
- C. JL shall record and maintain records of the amounts of each fuel combusted during each day.
- D. JL shall submit to EPA and the Department semi-annual reports. These reports shall include the calendar dates covered in the reporting period and

records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each 6-month period.

- E. The following address for EPA shall be used for any reports or notifications required to be copied to them:

Compliance Clerk  
USEPA Region 1  
1 Congress Street  
Suite 1100  
Boston, MA 02114-2023

**(18) Emergency Generators**

- A. JL shall limit Generators #2, #3, #5, and #6 to 500 hr/yr of operation each (based on a 12 month rolling total). [MEDEP Chapter 115, BPT]
- B. JL shall limit Generators #8, #9, and #10 to 300 hr/yr of operation each (based on a 12 month rolling total). [MEDEP Chapter 115, BPT]
- C. An hour meter shall be maintained and operated on each generator. [MEDEP Chapter 115, BPT]
- D. A log documenting the dates, times, and reason of operation for the Emergency Generators shall be kept. [MEDEP Chapter 115, BPT]
- E. The generators shall each fire #2 fuel oil with a sulfur limit not to exceed 0.05% by weight. Fuel records, including percent sulfur, shall be maintained. [MEDEP Chapter 115, BPT]
- F. JL must operate and maintain aftercoolers on Generators #8, #9, and #10 designed to maintain a coolant temperature below 60 °C.
- G. Emissions shall not exceed the following:

<b>Emission Unit</b>	<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>
Generator #6	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Generator #8	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Generator #9	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)
Generator #10	PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)

H. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #2	0.28	0.28	0.12	10.28	2.21	0.82
Generator #3	0.30	0.30	0.13	10.85	2.34	0.86
Generator #5	0.12	0.12	0.05	4.23	0.91	0.34
Generator #6	1.50	1.50	0.64	39.90	10.60	1.12
Generator #8	1.85	1.85	0.79	28.80	13.12	1.39
Generator #9	1.85	1.85	0.79	28.80	13.12	1.39
Generator #10	1.85	1.85	0.79	28.80	13.12	1.39

- I. Visible emissions from the generators shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.  
[MEDEP Chapter 101]

(19) **Incinerator #1** [MEDEP Chapter 115, BPT]

- A. Incinerator #1 shall be used for the disposal of type 0 through 5 and type 7 waste only.
- B. Incinerator #1 shall not exceed the maximum design charging rate of 175 lbs/hour. Auxiliary fuel input to the primary and secondary chamber shall be #2 fuel with a maximum sulfur content not to exceed 0.25% by weight.
- C. A log shall be maintained recording the weight of waste charged, preheating time, charging time, afterburner temperature directly after charging and every 60 minutes after startup until, and including, final shutdown time, and time of final shutdown. For facilities operating a chart recorder, the start time, date, and weight of waste charged may be logged on the chart.
- D. The secondary chamber of Incinerator #1 shall be preheated as specified by the manufacturer to a minimum of 2000 °F prior to combusting any waste and shall be maintained at a minimum of 2000 °F during the duration of the burn.
- E. Once the burn cycle has commenced by introduction of primary chamber combustion, Incinerator #1 shall be operated in an efficient manner and as specified by the manufacturer for the period of time between preheat and reaching the set operational temperature to be a minimum of 2000 °F in the secondary chamber.

- F. A pyrometer and ¼ inch test port shall be installed and maintained at that location of the incinerator or refractory lined stack which provides sufficient volume to insure a flue gas retention time of not less than 2.0 seconds at the minimum of 2000 °F.
- G. Emissions from Incinerator #1 shall be limited to the following:

<b>Pollutant</b>	<b><u>gr/dscf</u></b>	<b><u>lb/hr</u></b>
<b>PM</b>	0.10 <sup>a</sup>	0.69
<b>PM<sub>10</sub></b>	n/a	0.69
<b>SO<sub>2</sub></b>	n/a	0.95
<b>NO<sub>x</sub></b>	n/a	2.10
<b>CO</b>	n/a	0.18
<b>VOC</b>	n/a	0.08

<sup>a</sup> Corrected to 7% O<sub>2</sub>.

- H. Visible emissions from Incinerator #1 shall not exceed an opacity limit of 5% based on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a one hour period.
- I. The ash will be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management.
- J. The incinerator operator(s) shall receive adequate training to operate the incinerator in accordance with the manufacturer's specifications, and shall be familiar with the terms of this Air Emission License as it pertains to the operation of the incinerator.

(20) **Incinerator #2** [MEDEP Chapter 115, BPT]

- A. Incinerator #2 shall be used for the disposal of type 0 through 4 waste only and shall not be used for the disposal of any cytotoxic (antineoplastic) drugs or any radioactive wastes.
- B. Incinerator #2 shall not exceed the maximum design charging rate of 175 lbs/hour. Auxiliary fuel input to the primary and secondary chamber shall be #2 fuel with a maximum sulfur content not to exceed 0.25% by weight.
- C. A log shall be maintained recording the weight of waste charged, preheating time, charging time, afterburner temperature directly after charging and every 60 minutes after startup until, and including, final shutdown time, and time of final shutdown. For facilities operating a chart recorder, the start time, date, and weight of waste charged may be logged on the chart.

- D. The secondary chamber of Incinerator #2 shall be preheated as specified by the manufacturer to a minimum of 1800 °F prior to combusting any waste and shall be maintained at a minimum of 1800 °F during the duration of the burn.
- E. Once the burn cycle has commenced by introduction of primary chamber combustion, Incinerator #2 shall be operated in an efficient manner and as specified by the manufacturer for the period of time between preheat and reaching the set operational temperature to be a minimum of 1800 °F in the secondary chamber.
- F. A pyrometer and ¼ inch test port shall be installed and maintained at that location of the incinerator or refractory lined stack which provides sufficient volume to insure a flue gas retention time of not less than 1.0 seconds at the minimum of 1800 °F.
- G. Emissions from Incinerator #2 shall be limited to the following:

<b>Pollutant</b>	<b><u>gr/dscf</u></b>	<b><u>lb/hr</u></b>
<b>PM</b>	0.15 <sup>a</sup>	0.69
<b>PM<sub>10</sub></b>	n/a	0.69
<b>SO<sub>2</sub></b>	n/a	0.95
<b>NO<sub>x</sub></b>	n/a	2.10
<b>CO</b>	n/a	0.18
<b>VOC</b>	n/a	0.08

<sup>a</sup> Corrected to 7% O<sub>2</sub>.

- H. Visible emissions from Incinerator #2 shall not exceed an opacity limit of 5% based on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a one hour period.
- I. The ash will be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management.
- J. The incinerator operator(s) shall receive adequate training to operate the incinerator in accordance with the manufacturer's specifications, and shall be familiar with the terms of this Air Emission License as it pertains to the operation of the incinerator.
- (21) JL shall operate the ethylene oxide units in accordance with the manufacturer's specifications.
- (22) **HAP Limit**  
JL shall not exceed a facility wide emission limit of 0.8 ton per year for all HAPs combined, based on a 12 month rolling total.

- (23) JL shall install and maintain a submerged fill pipe in the 2,000 gallon gasoline storage tank that is no more than 6 inches from the bottom of the tank. JL shall also maintain on its premises, records of gasoline throughput, which will allow the monthly and annual throughput to be determined. If JL's monthly or annual throughput ever exceeds the initial applicability threshold for the Stage I provisions of Chapter 118, JL shall notify the Department of its applicability within thirty (30) days and install a Stage I Vapor Balance System in accordance with Section 3(B)(1) of the regulation, within sixty (60) days. Copies of these records shall be maintained for a minimum of three (3) years. These records shall be available for inspection during normal business hours and copies shall be provided to the Department and/or EPA upon request.
- (24) JL shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605).
- (25) **Annual Emission Statement**  
In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:
- 1) A computer program and accompanying instructions supplied by the Department;  
or
  - 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by September 1 or as otherwise specified in Chapter 137.

(26) **Payment of Annual License Fee**

JL shall pay the annual air emission license fee within 30 days of January 31<sup>st</sup> of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

**The term of this license shall be five (5) years from the signature date above.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/16/03

Date of application acceptance: 12/23/03

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Lynn Ross, Bureau of Air Quality.